



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/027,577  | 12/20/2001  | Ajay Kamalvanshi     | 4749-104US          | 1018             |
| 32294   | 7590        | 04/06/2005           | EXAMINER            |                  |
| SQUIRE, SANDERS & DEMPSEY L.L.P.<br>14TH FLOOR<br>8000 TOWERS CRESCENT<br>TYSONS CORNER, VA 22182 |             |                      | PUENTE, EMERSON C   |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2113                |                  |

DATE MAILED: 04/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                              |                     |  |
|------------------------------|------------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>       | <b>Applicant(s)</b> |  |
|                              | 10/027,577                   | KAMALVANSI ET AL.   |  |
|                              | Examiner<br>Emerson C Puente | Art Unit<br>2113    |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 31 January 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-16 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-16 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 December 2001 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

This action is made **Final**. Claims 1-16 have been examined.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,5,6,7,9,13,14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,615,364 of Marks.

In regards to claim 1 and 9, Marks discloses a system and method for providing persistency fault tolerant data stored in a database on a device in a networked environment for an external application, the device having an active processor system and a standby processor system, the system and method comprising the following steps:

providing an identical standby copy of an active database located on the active processor system, on the standby processor system (see column 3 lines 1-15),

monitoring the active processor for a failure (see column 3 lines 15-20)

assuming control by the standby processor system assumes control when the failure is detecte (see column 3 lines 15-20).

wherein switching from the active database to the standby database is transparent to the external application (see column 2 lines 5-10).

In regards to claim 5, 6, 13, and 14, since a database is a file of records, each containing fields together with a set of functions, it is necessary and thus inherent to define a database using a predetermined format and to generate structure and metadata corresponding to the database using the definition in the predetermined format.

In regards to claim 7 and 15, Marks discloses:

accessing the database through an application program interface (see column 3 lines 5-8).

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marks in view of US Patent No. 6,411,969 of Tam.

In regards to claim 2 and 10, Marks fails to disclose:

keeping a compressed backup copy of the database with signature on the active processor system and on the standby processor system.

However, Tam discloses a database backup, which is a snapshot of an entire database or parts of a database (see column 9 lines 65-67), and further discloses identifying tape name (signature) and whether the backup is compressed or not compressed (see column 6 lines 30-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to keep a compressed backup copy of the database with signature on the active

processor system and on the standby processor system. A person of ordinary skill in the art at the time of the invention would have been motivated because Marks is concerned with providing fault tolerance (see column 3 lines 15-25) and including a database backup, which is a snapshot of an entire database or parts of a database (see column 9 lines 65-67), as per teaching Tam, provides additional fault tolerance.

In regards to claim 3 and 11, Tam disclose:

recovering data from the compressed backup copy when a failure event occurs (see column 1 lines 24-26).

In regards to claim 4 and 12, Tam disclose:

recovering data from the compressed backup copy when a corruption event occurs (see column 5 lines 16-19).

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marks in view of US Patent No. 5,317,742 of Bapat and publication “Structure of Management Information Version 2 (SMIv2)” by McCloghrie et al. referred hereinafter ”McCloghrie”.

In regards to claim 8 and 16, Marks fails to explicitly disclose:

wherein the predetermined format is Structure of Management Information version 2 (SMIv2) format.

However, Bapat discloses Structure of Management Information (SMI) is used to design the formats and templates for data structures within a database (see column 7 lines 59-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made wherein the predetermined format is Structure of Management Information (SMI)

format. A person of ordinary skill in the art at the time of the invention would have been motivated because SMI is known predetermined format used to design the formats and templates for data structures within a database, as per teaching of Bapat (see column 7 lines 59-64).

Furthermore, McCloghrie discloses Structure of Management Information version 2 (SMIv2) as a current version of Structure of Management Information (see page 3 bottom paragraph).

It would have been obvious to one of ordinary skill in the art at the time the invention was made wherein the predetermined format is Structure of Management Information version 2 (SMIv2) format. A person of ordinary skill in the art at the time of the invention would have been motivated because Bapat discloses Structure of Management Information and structure of Management Information version 2 (SMIv2) is a more current up to date version of Structure of Management Information, as per teaching of McCloghrie.

#### ***Response to Arguments***

Applicant's arguments filed January 31, 2005 have been fully considered but they are not deemed to be persuasive.

In response to applicant's argument "However, Marks fails to teach or suggest, 'wherein switching from the active database to the standby database is transparent to the external application,' as recited in independent claims 1 and 9. It appears that Marks is limited to providing that the backup database is transparent. No description is provided in Marks suggesting that the switching from the communications agent to the backup database is

transparent. As recited in independent claims 1 and 9, the switching . . . is transparent to the external application.' In contrast, Marks provides that the database is transparent to the user. Accordingly, Applicants respectfully assert that Marks fails to teach or suggest all the recitations of independent claims 1 and 9." (see top paragraph page 8), examiner respectfully disagrees.

The claim limitation cites "... switching from the active database to the standby database is transparent to the external application". Marks discloses "... producing a redundant system which makes the backup database invisible or transparent to the user (external application)...."(see column 2 lines 5-10). As the backup database is transparent, the user or external application would not be aware that a switch from the active to the standby database would exist. This results in a seamless or transparent switch from the primary to the backup database, where there is no delay or interruption. Marks further proves this point by citing when the backup assumes the role of the primary, it is not necessary for applications interacting with the network to be postponed or delayed (see column 3 lines 20-25).

In response to applicant's argument "Marks does not provide a checksum as in the present invention,"(see middle paragraph page 8), although examiner reads in light of the specifications, *limitations appearing in the specification but not recited in the claims are not read into the claim.* The limitation "providing a checksum" is not recited in the claim. Thus, argument is moot. Examiner maintains his rejection.

In regards to applicant's argument "Nothing in Tam describes keeping a compressed copy of a database" (see top paragraph page 11), examiner respectfully disagrees. Tam discloses a database backup, which is a snapshot of an entire database or parts of a database (see column 9

lines 65-67), and further discloses identifying tape name (signature) and whether the backup is compressed or not compressed (see column 6 lines 30-35). Examiner maintains his rejection.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emerson C Puente whose telephone number is (571) 272-3652. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ECP  
4/4/05

  
ROBERT BEAUSOUIL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100